

REMARKS

Reconsideration and further examination of the application, as amended, are respectfully requested.

In the Office Action the drawing was objected to because of missing reference numerals. Applicants are submitting under separate cover a formal version of Fig. 1. The formal version of Fig. 1 includes the missing reference numbers 20c, 22c, 34, 38 and 44, and complies with 37 C.F.R. §1.84. Accordingly, Applicants request that the drawing objection be withdrawn.

Claims 1-12 are pending. The applicants have amended claims 1, 2, 4 and 5 to better claim the invention, in accordance with the Examiner's suggested changes. New claims 6-12 have been added. The specification has also been amended in several places to correct minor, typographical errors. Further, a new abstract is submitted to comply with the requirements of 37 C.F.R. §1.72(b). No new matter is being introduced.

In the Office Action, originally filed claims 1 and 2 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,334,163 to Dreps et al. ("Dreps"). Claims 3-5 were found to be allowable if rewritten. Applicant respectfully traverses the rejections of claims 1 and 2 for the reasons set forth herein.

First, Applicants note that, as recognized by the Examiner, Dreps does not disclose a replica of a forwarded clock signal that is delayed. Applicants submit that, because of this failure, the rejection of claims 1 and 2 is improper. To satisfy a *prima facie*

obvious rejection, the cited references must teach or suggest **all** (not just some) of the claimed limitations. See MPEP §2143.03 (“To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art”). Because Dreps admittedly fails to teach or suggest one of the claimed features, i.e., the replica of the forwarded clock signal being delayed, the §103 rejection, which is based solely upon Dreps, is improper and should be withdrawn.

Second, the claimed invention is distinguishable over Dreps.

More specifically, Claim 1, as amended, recites in relevant part:

“an input latch connected to receive the data on said data conductors, **said latch being clocked by said forwarded clock signal,**

“means for maintaining a delayed replica of said forwarded clock signal **in synchronism with said forwarded clock signal**, said delayed replica being a local clock signal for internal operations of said receiving unit”, and

“a second latch connected to receive the contents of said input latch, **said second latch being clocked by said local clock signal on transitions alternate to those on which said input latch is clocked**”.

The Office Action equates Dreps’ latches 408 and 422 (Fig. 4A) with Applicants’ claimed input latch. However, Dreps’ latches 408 and 422 are not clocked by a forwarded clock signal as recited in claim 1. As shown in Fig. 3 of Dreps, data 322 and **bus clock 306** pass from transmitting chip 302 to receiving chip 304. However, as shown in Fig. 4A of Dreps, the latches 408 and 422 are clocked by I/O clock signal 336, not by the bus clock 306 that was sent by the transmitting chip 302. This is confirmed by Dreps in the written description. Specifically, the Examiner’s attention is drawn to Col. 6, lines 45-47, which states that latch 408 latches data “on a rising edge of [I/O] clock 336”.

Similarly, at Col. 6, lines 63-64, Dreps states that latch 422 “is also clocked by I/O clock 336”.

Bus clock 306, moreover, which is sent by the transmitting chip 302 to the receiving chip 304, is very different from the I/O clock 336, which is used to clock the latches 408 and 422. This is clearly shown in Dreps timing diagram of Fig. 4B, which shows Dreps’ I/O clock 336 being entirely out of phase with the bus clock 306. Because Dreps fails to teach or suggest a latch that is clocked by a forwarded clock signal that is in synchronism with a local clock, the rejection of claim 1 based on Dreps should be withdrawn.

Independent claim 2 similarly recites that first and second latches are clocked by the forwarded clock signal. Accordingly, claim 2 is also allowable over the art of record. Furthermore, Applicants submit that new claim 6 depends from an allowable base claim, that new independent claims 7 and 9 are distinguishable over the art of record for the reasons set forth above, and that new claims 8 and 10-12 depend from allowable base claims.

Applicants submit that the application, as amended, is in condition for allowance and early favorable action is requested.

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